Notice of Allowability	Application No. 10/699,205	Applicant(s) SMITH ET AL.	
	Examiner Satya B. Sastri	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *amendment filed on JUne 5, 2006*.

2. ☒ The allowed claim(s) is/are *1-35*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S COMMENT/REASONS FOR ALLOWANCE

1. All previous rejections have been overcome by the amendment filed on June 5, 2006 and the rejections are withdrawn. ***Claims 1-35*** are now pending in the application.

2. The terminal disclaimers filed on June 5, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending applications 10/425,195 and 11/301,359 have been reviewed and is accepted. The terminal disclaimer has been recorded.

Reasons For Allowance

3. ***Claims 1-35*** are allowed.

4. The following is an Examiner's Statement of Reasons for Allowance:

The instant claims are allowable over prior art to Harada et al. (EP 0827753 A2), Choi et al. (US 5,032,628), Kajikawa et al. (US 6,716,894 B2), Nagasuna et al. (US 2003/018115 A1), Engelhart et al. (US 5,731,365), Ball et al. (WO/9118042) or Mukaida et al. (EP 0612533 B1).

Instant claims are directed to a superabsorbent polymer composition comprising a superabsorbent polymer consisting essentially of (a) 55-99.9 wt.% of polymerizable unsaturated acid group containing monomers and (b) 0.001 to 5 wt.% by wt. of internal crosslinking agent based on the wt. of (a); wherein the polymer particles further comprise (c) 0.001 to about 5% by

wt. of dry polymer powder, of surface crosslinking agent applied to the particle surface; (d) 0.01 to about 5% by wt. of dry polymer powder, of penetration modifier; (e) 0 to about 5% by wt. of dry polymer powder, of multivalent metal salt; (f) 0 to about 2% by wt. of dry polymer powder, of surfactant; (g) 0.01 to about 5% by wt. of dry polymer powder, of an insoluble inorganic powder; and (h) 0.01 to about 0.5% by wt. of dry polymer powder, of a thermoplastic polymer that fully encapsulates the particle surface, wherein the composition has a degree of neutralization of more than 25%.

Harada et al. disclose a water absorbent resin based on polymers derived from a variety of monomers such as (meth)acrylic acid and salts thereof, (meth)acrylamide, methoxy polyethylene glycol (meth)acrylate etc. Most advantageously, the absorbent resin comprises (meth)acrylic acid in amounts ranging from 30-90 mole%, neutralized with a basic substance. Additionally, a variety of water soluble cross-linking monomers are disclosed as being useful in amounts ranging from 0.005-1 part by weight, based on 100 parts by weight of the water soluble unsaturated monomer. The amount of surface crosslinking agent depends on the type used and also on the type of resin, and may be used in amounts ranging from 0.01 to 5 parts by weight, based on 100 parts by weight of the superabsorbent resin. Additionally, the compositions include inorganic powders such as synthetic and natural zeolite, talc, clay, silicon and titanium dioxide etc. to manifest affinity for water and insolubility or spraining solubility in water.

Choi et al. disclose water absorptive resin prepared from neutralized acrylic acid, methacrylic acid and a crosslinking agent and subsequently, surface crosslinked and mixed with a silicate. Polymerization mixture may comprise 70-90 mole% of neutralized acrylic acid, 10-30 mole% methacrylic acid. The working example 1 discloses the internal crosslinked agent with

the instant claimed range of 0.001 to 5 % by weight. Additionally, 1.2-8% by weight of surface crosslinking agent may be used to modify the properties. Silicate particles are also disclosed in amounts of 0.1-5% by weight of the composition.

Prior art to Kajikawa et al. concerns water absorbing resin powder having a mass average particle diameter of 300-600 microns. The water absorbing resins are obtained by polymerizing acrylic acid or its salt with a crosslinking agent. Nagasuna et al. disclose an absorbent structure comprising crosslinked water absorbent resin, 0.001-5 parts by wt. of surface crosslinking agent. Disclosed surface crosslinking agents include multivalent metallic compounds.

Secondary reference to Engelhart et al. discloses hydrogels which are coated with insoluble film-forming polymers. Coating hydrogels with such polymers may result in dust-free abrasion resistant highly swellable polymer. Secondary reference to Ball et al. discloses water absorbent resin rendered adhesive by incorporating a thermoplastic polymer with a hydrophilic character. 1-3 parts of the thermoplastic resin may be used for 100 parts of absorbent polymer. Secondary reference to Mukaida et al. disclose a water absorbent composition comprising water absorbent polymer particles (A), fiber and resin powder (B) comprising polyolefin modified with carboxylic acid used in amounts of 0.5 to 30 parts by wt. per 100 parts of water absorbent polymer.

The compositions as recited in instant claims are not taught or suggested by the prior art of record, alone in combination. Therefore, the instantly claimed invention is deemed allowable over closest prior art of record as per said art neither anticipating nor rendering, alone or in combination, the instantly claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

Future Correspondence

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri whose telephone number is 571-272-1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273 8300 for regular communications. The unofficial direct fax phone number to the Examiner's desk is 571-273-1112.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SATYA SASTRI

July 14, 2006

DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700